

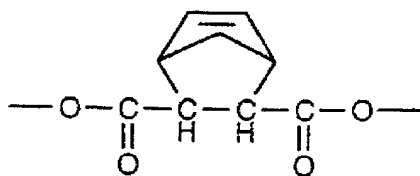
Examples of further suitable starting materials for the preparation of polyesters (B) are adipic acid, suberic acid, phthalic acid isomers, tetrahydrophthalic acid, endomethylenetetrahydrophthalic acid, hexahydrophthalic acid, fumaric acid, maleic acid, itaconic acid, citraconic acid, trimellitic acid or pyromellitic acid; ethylene glycol, polyethylene glycols, propylene glycol, polypropylene glycols, butanediol isomers, hexanediol, neopentyl glycol, trimethylolpropane, glycerol, pentaerythritol, bisphenol A or hydrogenated bisphenol A; OH-polyfunctional polymers such as hydroxyl-modified polybutadienes or hydroxyl-bearing polyurethane prepolymers and epoxy resins; polyfunctional natural substances or their derivatives such as linseed oil fatty acid, dimeric and polymeric linseed oil fatty acid, castor oil, and castor oil fatty acid. Also of importance are alkoxylation and propoxylation products of the aforementioned polyols. Moreover, the introduction of amide and imide structures in accordance with DE-A-157 00 273 and DE-A-172 00 323 into polyesters (B) is also known prior art.

The introduction of the structural units I or V and/or II or VI takes place preferably through use of the

above-described acidic esters in the course of the polycondensation.

A further possibility is to prepare polyesters with an excess of acid and then to react them with DCPD. In this case, a high degree of conversion generally necessitates the use of catalysts, an example being boron trifluoride etherate. At relatively high temperatures and pressure, the products include oligo-DCPD structures (structural unit II).

Where in this reaction the polyesters (B) contain double bonds in the polymer chain, e.g., in the form of maleic or fumaric esters, then grafting with cyclopentadiene produces endomethylenetetrahydrophthalic acid structures VIII.



(VIII)

Also of particular importance are polyesters (B) in accordance with DE-A-43 21 533, which are obtained using hydroxy-functional allyl ethers and which have a particularly high photosensitivity. Also of

significance are polyesters (B) whose carboxyl groups that remain free during the polycondensation are reacted with unsaturated epoxide compounds, preferably glycidyl (meth)acrylate; this measure also brings about
5 an increase in photosensitivity.

The incorporation of photoinitiator groups II into the polyesters (B) is possible, for example, by using benzophenonetetracarboxylic acid, benzophenonetetra-
10 carboxylic anhydride or benzophenonetetracarboxylic esters or 4-hydroxybenzophenone in the polycondensation. In this context it is preferred first to prepare hydroxyl-terminated polyester precursors using an excess of hydroxyl compounds and then to react these
15 precursors with benzophenonetetracarboxylic anhydride. The benzophenone structures are incorporated into the polyesters (B) in chain positions, and carboxyl groups are produced. It is likewise preferred then to react these carboxyl groups with unsaturated epoxide
20 compounds, preferably glycidyl (meth)acrylate.

The synthesis of the polyesters (B) which satisfy specific requirements in respect, for example, of hardness, elasticity, viscosity or softening point is
25 carried out in accordance with rules known to the skilled worker, through selection of the synthesis